CLAIMS

1. A condensed furan compound of the formula (I):

$$\begin{array}{c|c}
 & R^3 \\
 & N - X \\
 & O \\
 & N \\
 & O \\
 & A \\
 & Y
\end{array}$$
(I)

5 wherein, Ring:

is

$$R^{2A}$$
 R^{2B} R^{2A} R^{2B} R^{2B}

Ring X is:

Y is an optionally substituted amino; an optionally substituted cycloalkyl; an optional substituted aryl; an optionally substituted saturated heterocyclic group; or an optionally substituted unsaturated heterocyclic group;

- A is a single bond; an alkylene optionally substituted by oxo; an alkenylene; an alkenylidene; or an oxygen atom;

 R^{1A}, R^{1B} are the same or different and each is hydrogen; a halogen; an alkyl; a haloalkyl; an alkoxy; cyano; nitro; or an optionally substituted amino;
- R^{1C} is hydrogen, an alkyl or a halogen;
 R^{2A}, R^{2B} are the same or different and each is hydrogen; a halogen; an optionally substituted alkyl; an optionally substituted alkoxy; an optionally substituted amino; nitro; cyano; hydroxy; carboxy; an optionally substituted alkoxycarbonyl; an optionally substituted carbamoyl; a carbonyl substituted by an optionally substituted saturated heterocyclic group; an optionally substituted saturated heterocyclic group; aryl; or an optionally substituted unsaturated heterocyclic group;

R³ is hydrogen or an alkyl; and

- 20 R⁴ is hydrogen or an alkyl, or a pharmaceutically acceptable salt thereof.
 - 2. The condensed furan compound according to claim 1, wherein Ring:

25 is

$$R^{2A}$$
 R^{2B} R^{2A} R^{2B} R^{2B} R^{2B} R^{2A} R^{2B} R^{2A} R^{2B} R^{2B}

wherein the symbols are the same as defined in claim 1, or a pharmaceutically acceptable salt thereof.

3. The condensed furan compound according to claim 1 or 2, wherein Ring:

is

- wherein the symbols are the same as defined in claim 1, or a pharmaceutically acceptable salt thereof.
 - 4. The condensed furan compound according to any one of claims 1 to 3, wherein Y is an optionally substituted cycloalkyl or an optionally substituted saturated heterocyclic group,
- or a pharmaceutically acceptable salt thereof.
- 5. The condensed furan compound according to any one of claims 1 to 4, wherein the substituent in the definition of "optionally substituted cycloalkyl" for Y is a group selected from an optionally substituted alkyl; an optionally substituted carbamoyl; a carbonyl substituted by an optionally substituted saturated heterocyclic group; an optionally substituted amino; and an optionally substituted saturated heterocyclic group,

or a pharmaceutically acceptable salt thereof.

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- 6. The condensed furan compound according to any one of claims 1 to 5, wherein the substituent in the definition of "optionally substituted cycloalkyl" for Y is a group selected from: (1) an amino optionally substituted by a group selected from an optionally substituted acyl, an alkoxycarbonyl and an optionally substituted alkyl; (2) an aminoalkyl optionally substituted by a group selected from an optionally substituted acyl and an optionally substituted alkyl; (3) a carbamoyl optionally substituted by an optionally substituted alkyl; (4) a carbonyl substituted by a saturated heterocyclic group; and (5) an optionally substituted saturated heterocyclic group, or a pharmaceutically acceptable salt thereof.
- The condensed furan compound according to claim 5 or 6, wherein the saturated heterocyclic group is a 4- to 7-membered
 saturated heterocyclic group containing 1 to 4 hetero atoms selected from the group consisting of nitrogen atom, oxygen atom and sulfur atom,

or a pharmaceutically acceptable salt thereof.

- 8. The condensed furan compound according to any one of claims 5 to 7, wherein the saturated heterocyclic group is a group selected from imidazolidinyl, pyrazolidinyl, piperidyl, piperidino, piperazinyl, morpholinyl, morpholino, thiomorpholinyl, thiomorpholino, homopiperazinyl, homopiperidyl, homopiperidino and pyrrolidinyl, or a pharmaceutically acceptable salt thereof.
- 25 9. The condensed furan compound according to any one of claims 1 to 6, wherein the substituent in the definition of "optionally substituted cycloalkyl" for Y is: (1) an amino optionally substituted by a group selected from acyl, alkoxycarbonyl, alkyl, aminoalkyl, alkyl-substituted aminoalkyl, alkoxycarbonylaminoalkyl and acylaminoalkyl; (2) an alkyl substituted by amino optionally substituted by alkyl; (3) a carbamoyl

optionally mono- or di-substituted by alkyl or aminoalkyl which may be substituted by alkyl; (4) a group selected from pyrrolidinylcarbonyl, piperidylcarbonyl, piperazinylcarbonyl, morpholinocarbonyl, homopiperidinylcarbonyl and homopiperazinylcarbonyl; or (5) a saturated heterocyclic group selected from pyrrolidinyl optionally substituted by oxo, piperidyl optionally substituted by oxo, morpholino optionally substituted by oxo, homopiperidinyl optionally substituted by oxo, and homopiperazinyl optionally substituted by oxo, or a pharmaceutically acceptable salt thereof.

- 10. The condensed furan compound according to any one of claims 1 to 6, wherein the substituent in the definition of "optionally substituted cycloalkyl" for Y is pyrrolidinyl optionally substituted by oxo; morpholino optionally substituted by oxo; dialkylcarbamoyl;
- pyrrolidinylcarbonyl; amino that is di-substituted by alkyl and acylaminoalkyl; or dialkylamino, or a pharmaceutically acceptable salt thereof.

- 11. The condensed furan compound according to any one of claims 1 to 3, wherein Y is an aryl or unsaturated heterocyclic group substituted by an optionally substituted carbamoyl, or a phrmaceutically acceptable salt thereof.
 - 12. The condensed furan compound according to any one of claims 1 to 11, wherein A is a single bond or methylene, or a pharmaceutically acceptable salt thereof.
- 25 13. The condensed furan compound according to any one of claims 1 to 4, wherein A is a single bond or methylene, and Y is an unsaturated heterocyclic group or a saturated heterocyclic group optionally substituted by alkyl, or a pharmaceutically acceptable salt thereof.
- 30 14. The condensed furan compound according to any one of claims 1

- to 3, wherein A is tetramethylene, and Y is an optionally substituted saturated heterocyclic group, or a pharmaceutically acceptable salt thereof.
- 15. The condensed furan compound according to any one of claims 1
 to 14, wherein R^{1A}, R^{1B} are the same or different and each is hydrogen, a halogen or an alkyl,
 or a pharmaceutically acceptable salt thereof.
- 16. The condensed furan compound according to any one of claims 1 to 15, wherein R^{2A}, R^{2B} are the same or different and each is hydrogen; a halogen; an optionally substituted alkyl; an optionally substituted alkoxy; an optionally substituted amino; cyano; carboxy; an alkoxycarbonyl; an optionally substituted carbamoyl; a carbonyl substituted by saturated heterocyclic group; or a saturated heterocyclic group,
- or a pharmaceutically acceptable salt thereof.

- 17. The condensed furan compound according to claim 16, wherein the saturated heterocyclic group is a 4- to 7-membered saturated heterocyclic group containing 1 to 4 hetero atoms selected from the group consisting of nitrogen atom, oxygen atom and sulfur atom, or a pharmaceutically acceptable salt thereof.
- 18. The condensed furan compound according to any one of claims 1 to 17, wherein R^{2A}, R^{2B} are the same or different and each is hydrogen, fluoro, chloro, bromo, methyl, hydroxymethyl, methoxy, amino, methylsulfonylamino, acetylamino, t-butoxycarbonylamino,
- dimethylamino, cyano, carboxy, methoxycarbonyl, ethoxycarbonyl, methoxy, ethoxy, isopropoxy, methoxyethoxy, dimethylcarbamoyl, N-methyl-N-(2-methoxyethyl)carbamoyl, pyrrolidinyl, pyrrolidinylcarbonyl, morpholinocarbonyl or morpholino, or a pharmaceutically acceptable salt thereof.
 - 10 Me and from compound according to any one
- 30 19. The condensed furan compound according to any one of claims 1

to 18, wherein R³ is hydrogen, or a pharmaceutically acceptable salt thereof.

- 20. The condensed furan compound according to any one of claims 1 to 19, wherein R⁴ is hydrogen,
- or a pharmaceutically acceptable salt thereof.
 - 21. The condensed furan compound according to any one of claims 1 to 20, wherein Ring X is

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

wherein the symbols are as defined in claim 1, or a pharmaceutically acceptable salt thereof.

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22. The condensed furan compound according to claim 21, wherein Ring X is

wherein the symbols are as defined in claims 1,

- or a pharmaceutically acceptable salt thereof.
- 23. The condensed furan compound according to any one of claims 1 to 22, which is selected from the following compounds:
- (1) 5-amino-N-(5-chloropyridin-2-yl)-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (2) 6-amino-N-(5-chloropyridin-2-yl)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
 - (3) N-(4-chlorophenyl)-3-{[(trans-4-pyrrolidin-1-

ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,

- (4) N-(5-chloropyridin-2-yl)-5-[(methylsulfonyl)amino]-3- $\{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino\}$ furo[3,2-b]pyridine-2-carboxamide,
- (5) 2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-5-carboxylic acid,

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- (6) N-(5-chloropyridin-2-yl)-3-{[(trans-4-pyrrolidin-1-yl-cyclohexyl)carbonyl]amino}furo[3,2-c]pyridine-2-carboxamide,
- (7) N-(5-chloropyridin-2-yl)-5-(hydroxymethyl)-3-({[trans-4-(3-oxomorpholin-4-yl]cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (8) N-(5-chloropyridin-2-yl)-5-methoxy-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (9) N-(5-chloropyridin-2-yl)-3-{[(trans-4-pyrrolidin-1-yl-cyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (10) N-(5-chloropyridin-2-yl)-5-methoxy-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (11) N-(4-chlorophenyl)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (12) 5-amino-N-(5-chloropyridin-2-yl)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (13) 5-(acetylamino)-N-(5-chloropyridin-2-yl)-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (14) N-(5-chloropyridin-2-yl)-5-fluoro-3-({[trans-4-(3-oxomorpholin-4-yl]cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,

- (15) 5-chloro-N-(5-chloropyridin-2-yl)-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (16) N-(5-chloropyridin-2-yl)-5-methyl-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (17) N²-(5-chloropyridin-2-yl)-N⁵,N⁵-dimethyl-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2,5-dicarboxamide,

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- (18) 5-(acetylamino)-N-(5-chloropyridin-2-yl)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (19) t-butyl (2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridin-6-yl)-carbamate,
- (20) N-(5-chloropyridin-2-yl)-5-[(methylsulfonyl)amino]-3- ({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (21) N-(4-chlorophenyl)-3-({[trans-4-(2-oxopyrrolidin-1-yl)-cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (22) N-(5-chloropyridin-2-yl)-3-{[(1-pyridin-4-ylpiperidin-4-yl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (23) N-(5-chloropyridin-2-yl)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (24) t-butyl [2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridin-6-yl]carbamate,
- (25) 6-amino-N-(5-chloropyridin-2-yl)-3-({[trans-4-(2-oxo-pyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (26) 6-amino-N-(5-chloropyridin-2-yl)-3-{[(trans-4-pyrrolidin-1-yl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,

- (27) 2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-5-carboxylic acid,
- (28) N²-(5-chloropyridin-2-yl)-N⁵,N⁵-dimethyl-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2,5-dicarboxamide,

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- (29) N-(5-chloropyridin-2-yl)-5-(morpholin-4-ylcarbonyl)-3- {[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (30) t-butyl (2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridin-5-yl)-carbamate,
- (31) N-(5-chloropyridin-2-yl)-5-methyl-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (32) methyl 2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-5-carboxylate,
- (33) 5-bromo-N-(5-chloropyridin-2-yl)-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (34) N-(5-chloropyridin-2-yl)-5-[(methylsulfonyl)amino]-3-(([trans-4-(2-oxopyrrolidin-1-yl)cyclohexyl]carbonyl)amino)furo[3,2-b]pyridine-2-carboxamide,
- (35) N-(4-chlorophenyl)-3-({[trans-4-(dimethylamino)cyclohexyl]-carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (36) N-(5-chloropyridin-2-yl)-5-cyano-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (37) N-(5-chloropyridin-2-yl)-5-fluoro-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
 - (38) N^2 -(5-chloropyridin-2-yl)- N^5 -(2-methoxyethyl)- N^5 -methyl-3-

- ({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2,5-dicarboxamide,
- (39) N-(5-chloropyridin-2-yl)-3-({[trans-4-(dimethylamino)-cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,

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- (40) N-(5-chloropyridin-2-yl)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)-5-(pyrrolidin-1-ylcarbonyl)furo[3,2-b]pyridine-2-carboxamide,
- (41) t-butyl [2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridin-5-yl]carbamate,
- (42) 5-bromo-N-(5-chloropyridin-2-yl)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (43) N-(5-chloropyridin-2-yl)-5-(morpholin-4-ylcarbonyl)-3- ({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (44) N-(5-chloropyridin-2-yl)-3-({[trans-4-(dimethylamino)-cyclohexyl]carbonyl}amino)-5-methoxyfuro[3,2-b]pyridine-2-carboxamide,
- (45) 5-chloro-N-(5-chloropyridin-2-yl)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (46) 2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-({[trans-4-(2-oxopyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-5-carboxylic acid,
- (47) N-(5-chloropyridin-2-yl)-5-cyano-3-({[trans-4-(2-oxo-pyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (48) N-(5-chloropyridin-2-yl)-5-cyano-3-({[trans-4-(3-30 oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-

carboxamide,

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- (49) N-(5-chloropyridin-2-yl)-5-(hydroxymethyl)-3-({[trans-4-(2-oxopyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (50) N-(5-chloropyridin-2-yl)-5-methoxy-3-({[trans-4-(2-oxo-pyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (51) N-(5-chloropyridin-2-yl)-3-({[trans-4-(2-oxopyrrolidin-1-yl)cyclohexyl]carbonyl}amino)-5-(pyrrolidin-1-ylcarbonyl)furo[3,2-b]pyridine-2-carboxamide,
- (52) N-(5-chloropyridin-2-yl)-5-methyl-3-({[trans-4-(2-oxopyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (53) N-(5-chloropyridin-2-yl)-3-({[trans-4-(dimethylamino)-cyclohexyl]carbonyl}amino)-5-methylfuro[3,2-b]pyridine-2-carboxamide,
- (54) 5-chloro-N-(5-chloropyridin-2-yl)-3-({[trans-4-(dimethylamino)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (55) N²-(5-chloropyridin-2-yl)-3-({[trans-4-(dimethylamino)-cyclohexyl]carbonyl}amino)-N⁵,N⁵-dimethylfuro[3,2-b]pyridine-2,5-dicarboxamide,
 - (56) methyl 2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-5-carboxylate,
 - (57) N-(5-chloropyridin-2-yl)-3-({[trans-4-(2-oxopyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
 - (58) 5-amino-N-(5-chloropyridin-2-yl)-3-({[trans-4-(2-oxo-pyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
 - (59) N-(5-chloropyridin-2-yl)-3-({[trans-4-(2-oxopyrrolidin-1-

- yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (60) 2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-{[5-(3-oxomorpholin-4-yl)pentanoyl]amino}furo[3,2-b]pyridine-5-carboxylic acid,
- (61) N-(5-chloropyridin-2-yl)-3-({[trans-4-(dimethylamino)-cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,

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- (62) 6-chloro-N-(5-chloropyridin-2-yl)-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (63) 5-chloro-N-(5-chloropyridin-2-yl)-3-({[trans-4-(2-oxo-pyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- $(64) N^2-(5-chloropyridin-2-yl)-N^5, N^5-dimethyl-3-(\{[trans-4-(2-oxopyrrolidin-1-yl]cyclohexyl]carbonyl\}amino)furo[3,2-b]pyridine-2,5-dicarboxamide,$
- (65) 6-(acetylamino)-N-(5-chloropyridin-2-yl)-3-({[trans-4-(pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
 - (66) t-butyl [2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-({[trans-4-(2-oxopyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridin-6-yl]carbamate,
 - (67) 6-chloro-N-(5-chloropyridin-2-yl)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
 - (68) N-(4-methylphenyl)-3-({[trans-4-(3-oxomorpholin-4-yl)-cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (69) 2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-6-carboxylic acid,
 - (70) N-(5-chloropyridin-2-yl)-3-{[5-(3-oxomorpholin-4-yl)pentanoyl]amino}furo[3,2-b]pyridine-2-carboxamide,
 - (71) 5-(acetylamino)-N-(5-chloropyridin-2-yl)-3-({[trans-4-(2-

oxopyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,

- (72) N-(4-chlorophenyl)-3-{[(trans-4-morpholin-4-ylcyclohexyl)-carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (73) 5-bromo-N-(5-chloropyridin-2-yl)-3-({[trans-4-(dimethylamino)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,

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- (74) N-(5-chloropyridin-2-yl)-3-({[trans-4-(dimethylamino)-cyclohexyl]carbonyl}amino)furo[2,3-b]pyridine-2-carboxamide,
- (75) 3-[({trans-4-[[3-(acetylamino)propyl](methyl)amino]-cyclohexyl}carbonyl)amino]-N-(5-chloropyridin-2-yl)furo[3,2-b]pyridine-2-carboxamide,
 - (76) trans-N'-(2-{[(5-chloropyridin-2-yl)amino]carbonyl}furo[3,2-b]pyridin-3-yl)-N,N-dimethylcyclohexane-1,4-dicarboxamide,
 - (77) N-(5-chloropyridin-2-yl)-3-({[trans-4-(pyrrolidin-1-yl-carbonyl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
 - (78) 2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-[({trans-4-[(dimethylamino)carbonyl]cyclohexyl}carbonyl)amino]furo[3,2-b]-pyridine-5-carboxylic acid,
- (79) methyl 2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-({[trans-4-(pyrrolidin-1-ylcarbonyl)cyclohexyl]carbonyl}amino)furo[3,2-b]-pyridine-5-carboxylate,
- (80) methyl 2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-[({trans-4-[(dimethylamino)carbonyl]cyclohexyl}carbonyl)amino]furo[3,2-b]pyridine-5-carboxylate,
- (81) 2-{[(5-chloropyridin-2-yl)amino]carbonyl}-3-({[trans-4-(pyrrolidin-1-ylcarbonyl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-5-carboxylic acid,
- $(82) \quad N^2-(5-chloropyridin-2-yl)-3-[(\{trans-4-[(dimethylamino\}-carbonyl]cyclohexyl\}carbonyl]amino]-N^5-(2-methoxyethyl)-N^5-$

methylfuro[3,2-b]pyridine-2,5-dicarboxamide,

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- (83) N^2 -(5-chloropyridin-2-yl)- N^5 -(2-methoxyethyl)- N^5 -methyl-3-({[trans-4-(pyrrolidin-1-ylcarbonyl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2,5-dicarboxamide,
- (84) N-(5-chloropyridin-2-yl)-5-pyrrolidin-1-yl-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (85) N-(5-chloropyridin-2-yl)-5-morpholin-4-yl-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (86) N-(5-chloropyridin-2-yl)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)-5-pyrrolidin-1-ylfuro[3,2-b]pyridine-2-carboxamide,
- (87) N-(5-chloropyridin-2-yl)-5-(dimethylamino)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (88) N-(5-chloropyridin-2-yl)-5-morpholin-4-yl-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- 20 (89) N-(5-chloropyridin-2-yl)-4-(2-methoxyethoxy)-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-c]pyridine-2-carboxamide,
 - (90) N-(5-chloropyridin-2-yl)-5-(2-methoxyethoxy)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
 - (91) N-(5-chloropyridin-2-yl)-5-(pyrrolidin-1-ylcarbonyl)-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (92) N-(5-chloropyridin-2-yl)-4-(2-methoxyethoxy)-3-({[trans-4-30 (3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-c]pyridine-2-

carboxamide,

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- (93) N-(5-chloropyridin-2-yl)-4-methoxy-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-c]pyridine-2-carboxamide,
- (94) N-(5-chloropyridin-2-yl)-3-({[trans-4-(dimethylamino)-cyclohexyl]carbonyl}amino)-5-pyrrolidin-1-ylfuro[3,2-b]pyridine-2-carboxamide,
- (95) N^2 -(5-chloropyridin-2-yl)- N^5 -(2-methoxyethyl)- N^5 -methyl-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2,5-dicarboxamide,
- (96) N-(5-chloropyridin-2-yl)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-c]pyridine-2-carboxamide,
- (97) N-(5-chloropyridin-2-yl)-5-(dimethylamino)-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (98) N-1H-indol-6-yl-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (99) N-(5-chloropyridin-2-yl)-4-methoxy-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-c]pyridine-2-carboxamide,
- (100) N-(5-chloropyridin-2-yl)-3-({[trans-4-(2-oxopyrrolidin-1-yl)cyclohexyl]carbonyl}amino)-5-pyrrolidin-1-ylfuro[3,2-b]pyridine-2-carboxamide,
- (101) N-(5-chloropyridin-2-yl)-5-isopropoxy-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
- (102) N-(5-chloropyridin-2-yl)-5-isopropoxy-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- '(103) N-(5-chloropyridin-2-yl)-3-({[trans-4-(dimethylamino)-cyclohexyl]carbonyl}amino)-5-(2-methoxyethoxy)furo[3,2-b]pyridine-2-

carboxamide,

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- (104) N-(5-chloropyridin-2-yl)-5-morpholin-4-yl-3-({[trans-4-(2-oxopyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (105) N-(5-chloropyridin-2-yl)-5-(dimethylamino)-3-({[trans-4-(2-oxopyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (106) N-(5-chloropyridin-2-yl)-3-({[trans-4-(dimethylamino)-cyclohexyl]carbonyl}amino)-5-morpholin-4-ylfuro[3,2-b]pyridine-2-carboxamide,
- (107) N-(5-chloropyridin-2-yl)-5-(2-methoxyethoxy)-3-({[trans-4-(2-oxopyrrolidin-1-yl)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
- (108) N-(5-chloropyridin-2-yl)-5-(dimethylamino)-3-({[trans-4-(dimethylamino)cyclohexyl]carbonyl}amino)furo[3,2-b]pyridine-2-carboxamide,
 - (109) N-(5-chloropyridin-2-yl)-3-({[trans-4-(dimethylamino)-cyclohexyl]carbonyl}amino)-5-isopropoxyfuro[3,2-b]pyridine-2-carboxamide,
- (110) N-1H-indol-6-yl-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-b]pyridine-2-carboxamide,
 - (111) N-(5-chloropyridin-2-yl)-4-cyano-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-c]pyridine-2-carboxamide,
- (112) N-(5-chloropyridin-2-yl)-4-methyl-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-c]pyridine-2-carboxamide,
 - (113) N-(5-chloropyridin-2-yl)-4-cyano-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-c]pyridine-2-carboxamide,
 - (114) N-(5-chloropyridin-2-yl)-4-methyl-3-({[trans-4-(2-

oxopyrrolidin-1-yl)cyclohyexyl]carbonyl}amino)furo[3,2-c]pyridine-2-carboxamide,

- (115) 4-chloro-N-(5-chloropyridin-2-yl)-3-({[trans-4-(3-oxomorpholin-4-yl)cyclohexyl]carbonyl}amino)furo[3,2-c]pyridine-2-carboxamide, and
- (116) N-(5-chloropyridin-2-yl)-4-methyl-3-{[(trans-4-pyrrolidin-1-ylcyclohexyl)carbonyl]amino}furo[3,2-c]pyridine-2-carboxamide, or a pharmaceutically acceptable salt thereof.
- 24. A compound of the formula (II):

$$R^3$$
 $N-X$
 $N \to X$
 $N \to X$

wherein the symbols are as defined in claim 1, or a salt thereof.

25. A compound of the formula (VI):

$$\begin{array}{c|c}
 & R^3 \\
 & V \\
 & V$$

wherein the symbols are as defined in claim 1, or a salt thereof.

15 26. A compound of the formula (IV):

$$\begin{array}{c|c}
 & O & O - R \\
 & O & O -$$

wherein R is hydrogen, C_{1-4} alkyl or a carboxy-protecting group, and the other symbols are as defined in claim 1, or a salt thereof.

27. A compound of the formula (IX):

$$\begin{array}{c|c}
 & O & O - R \\
 & O & O -$$

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wherein R is hydrogen, C_{1-4} alkyl or a carboxy-protecting group, and the other symbols are as defined in claim 1, or a salt thereof.